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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/059,428	01/29/2002	Andy Catalin Negoi	PHCH010005	5576

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TARRYTOWN, NY 10591

[REDACTED] EXAMINER

TRA, ANH QUAN

ART UNIT	PAPER NUMBER
	2816

DATE MAILED: 06/04/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	Application N .	Applicant(s)
	10/059,428	NEGOI, ANDY CATALIN
	Examiner Quan Tra	Art Unit 2816

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

1) Responsive to communication(s) filed on 24 April 2003.

2a) This action is FINAL.                  2b) This action is non-final.

3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

4) Claim(s) 1-10 is/are pending in the application.

4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.

5) Claim(s) \_\_\_\_\_ is/are allowed.

6) Claim(s) 1,2 and 8-10 is/are rejected.

7) Claim(s) 3-7 is/are objected to.

8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

9) The specification is objected to by the Examiner.

10) The drawing(s) filed on \_\_\_\_\_ is/are: a) accepted or b) objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11) The proposed drawing correction filed on \_\_\_\_\_ is: a) approved b) disapproved by the Examiner.

If approved, corrected drawings are required in reply to this Office action.

12) The oath or declaration is objected to by the Examiner.

#### Priority under 35 U.S.C. §§ 119 and 120

13) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a) All b) Some \* c) None of:

1. Certified copies of the priority documents have been received.

2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.

3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

14) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).

a) The translation of the foreign language provisional application has been received.

15) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

#### Attachment(s)

1) <input type="checkbox"/> Notice of References Cited (PTO-892)	4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____.
2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)	5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)
3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____.	6) <input type="checkbox"/> Other: _____.

## **DETAILED ACTION**

This office action is in response to the amendment filed 04/24/2003. A new ground of rejection is introduced.

### ***Claim Rejections - 35 USC § 112***

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claim 3 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 3 is indefinite because limitation “a gate switch control unit” has been recited in claim 1.

### ***Claim Rejections - 35 USC § 102***

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 1 and 2 are rejected under 35 U.S.C. 102(b) as being anticipated by Applicant admitted prior art figure 1 and 2.

As to claim 1, the prior art figures 1 and 2 disclose a charge pump device containing at least two stage (S1-Sn), whereby a stage (S1) comprises a switch (Sw1) and a charge device (CS1) which are arranged to generate a voltage higher than a supply voltage (IN), whereby the stages (S1-Sn) are arranged in series and a required multiplication factor of the charge pump is

adjustable by activating/deactivating a definable number of stages, whereby the switches (S1-Sn) of each stage are arranged in the same way and further comprising a gate switch control unit (Cb that controlling the gate of transistor MP1 in figure 2).

As to claim 2, it is inherent for a multiplication factor (MF) smaller than the maximal possible multiplication factor (Mfmax) the stages (S1-Sn) beginning from an input (IN) of the charge pump device will be activated.

***Claim Rejections - 35 USC § 103***

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 8-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Messager (USP 6346903) in view of Applicant's prior art figure 1.

Messager's figure 1 shows a display module (circuit figure 1) having a display driver (CC) for providing display information and voltages to a display unit (LCD DISPLAY) with a charge pump device (CHARGE PUMP). Thus, Messager's figure 1 shows all limitations of the claim except for the detail of the charge pump circuit. However, Applicant's figure 1 shows a charge pump circuit comprising at least two stage (S1-Sn), whereby a stage (S1) comprises a switch (Sw1 and circuit, not shown, that generating the control signal to Sw1) comprising a gate switch control unit (Cb in figure 2 that controlling the gate of transistor MP1) and a charge device (Cs1) which are arranged to generate a voltage higher than the supply voltage (IN), whereby the stages (S1-Sn) are arranged in series and a required multiplication factor of the

charge pump is adjustable by activating/deactivating a definable number of stages, whereby the switches (S1-Sn) of each stage are arranged in the same way. The prior art figure 1 having the advantage of providing a stable charge pump voltage. Therefore, it would have been obvious to one having ordinary skill in the art to use the charge pump in the prior art figure 1 to Message's charge pump circuit for the purpose of providing a stable charge pump voltage.

*Allowable Subject Matter*

7. Claims 3-7 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Claims 3-7 are objected because the prior art fails to teach a circuit (such as figure 3) having elements comprising boot capacitor (Cb) and switch control unit (GSU) arranged to control the gate of switch MP1.

*Response to Arguments*

8. Applicant's arguments have been fully considered but they are not persuasive. The objection of claims 3-7 in previous office action clearly indicated that claims 3-7 "would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. The amendments of claims 1 and 8-10 do not include all of the limitations of claim 3. Therefore, the prior art figures 1 and 2 still meet all limitations of the claims.

***Conclusion***

9. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

10. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. These references are cited as interest because they show some circuits analogous to the claimed invention.

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Quan Tra whose telephone number is 703-308-6174. The examiner can normally be reached on 8:00 A.M.-5:00 P.M..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Timothy Callahan can be reached on 703-308-4876. The fax phone numbers for the organization where this application or proceeding is assigned are 703-872-9318 for regular communications and 703-872-9319 for After Final communications.

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Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0956.

BT  
QT  
May 28, 2003

Terry D. Cunningham  
Primary Examiner